



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,832	02/23/2006	Abdoel Fazel Rajabali	2001-1427	8381
<div>466 7590 05/12/2011</div> <div>YOUNG & THOMPSON 209 Madison Street Suite 500 Alexandria, VA 22314</div>				
<div>EXAMINER</div> <div>WATKINS III, WILLIAM P</div>				
<div>ART UNIT PAPER NUMBER</div> <div>1783</div>				
<div>NOTIFICATION DATE DELIVERY MODE</div> <div>05/12/2011 ELECTRONIC</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

Office Action Summary

Application No.

10/562,832

Applicant(s)

RAJABALI ET AL.

Examiner

William P. Watkins III

Art Unit

1783

Period for Reply
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18, 20, 21 and 24-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18, 20-21 and 24-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The 112 rejection given in section 2 of the detailed portion of the office action mailed 02 September 2010 is withdrawn in view of applicant's claim amendments filed 02 March 2011. The art rejection given in section 4 of the detailed portion of the office action mailed 02 September 2010 is withdrawn in view of applicant's arguments and amendments presented in the amendment filed 02 March 2011. A modified ground of rejection based on prior art is given below.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18, 20-21, 24-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westre et al. (U.S. 6,114,050) in view of Anast (U.S. 6,648,273 B2).

Westre et al. teaches a multiple metal layer laminate with adhesive inner layers between the metal layers used as an aircraft skin panel (abstract). The reference teaches reduction in the number of inner metal layers with a resulting decrease in the

laminate thickness for areas that do not need to be reinforced with the central metal layers. The areas that are reinforced with extra layers are areas that transfer loads and receive fasteners (Figure 5, col. 13, lines 5-25). Anast teaches the formation of a support surface for aircraft panels by the use of frames and stringers that form a grid shaped support structure in order to allow the use of fasteners (abstract, Figure 3). The instant invention claims outer metal layers and an inner metal layer with openings with closed perimeters and reduced thickness of the laminate at the openings. It would have been obvious to one of ordinary skill in the art to form the central metal layers of Westre et al. with openings with closed perimeters in order to form grid shaped areas of reinforcement to hold fasteners used to join the panels to a support structure of frames and stringers because of the teachings of Anast. Variation in the pattern of the openings, and the number and thickness of inner metal layers would depend on the specific laminate reinforcement needed for a given application and would have been obvious to one of ordinary skill in the art, as would selection of specific metal and plastic materials. Regarding claim 35, Figure 5 of Westre et al. shows a slight gap between the plastic composite layers where they diverge at the edge of the inserted metal layers. This gap would be filled by resin flowing from the prepreg composite layers when the layers are put under pressure during consolidation. This resin would not contain the fibers of the prepreg and would be considered as a type of adhesive. Regarding claims 36 and 38, the central metal honeycomb layer of Westre et al. (element 40 in Figure 4B) is directly joined by adhesive to adjacent metal layers by adhesive (col. 10, lines 50-55).

4. Applicant's arguments with respect to claims 18, 20-21, 24-38 have been considered but are moot in view of the modified grounds of rejection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 571-272-1503. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WW/ww
May 9, 2011

/William P. Watkins III/
Primary Examiner, Art Unit 1794